IN THE CLAIMS

This listing of the claim will replace all prior versions and listings of claim in the present application.

Listing of Claims

1. (currently amended) A storage medium storing a program for when executed, making an active computer which holds a first disk management information buffer adapted to store physical device names of volumes stored in a disk device and volume identifiers with correspondence between the physical device names and the volume identifiers, function as:

a monitor for detecting that execution of a replica corresponding to a volume is completed in said disk device; and

a first switching unit of a standby computer, responsive to the result of the detection in said monitor, for determining to transmit, to said standby computer, of a notice for informing said standby ~~party~~ computer that a volume identifier stored in said volume subjected to the execution of the replica is changed,

wherein said program in said storage medium, when executed, making said standby computer which holds a second disk management information buffer adapted to store in corresponding relation physical device names of volumes and volume identifiers and a replica status management table adapted to manage a status concerning the presence or absence of a volume identifier, function as a second switching unit of said standby computer for executing:

a first process in which when said notice to the effect that said volume identifier stored in said volume is changed is received from said active

computer, a first flag is stored in said replica status management table in correspondence with said physical device name of said volume,

a second process including a step of deciding as to whether said first flag is stored in said replica status management table in correspondence with said physical device name according to which said volume identifier stored in said volume is acquired and said acquired volume identifier is stored in said second management information buffer in correspondence with said physical device name of said volume~~;~~, and

a third process in which when said second process is completed, said first flag stored in said replica status management table in correspondence with said physical device name is erased.

Claims 2-5 (canceled).

6. (currently amended) A party switchover method in a computer system having an active computer, a standby computer for taking over processes of said active computer and a disk device for storing volumes shared by said active computer and said standby computer, comprising:

a first step of causing said active computer to decide whether a volume identifier stored in a volume is changed;

a second step of causing said active computer to determine, in accordance with the result of said decision in said first step, transmission to said standby computer of a notice to the effect that said volume identifier is changed;~~A party switchover method according to claim 4,~~

a third step of causing said active computer to transmit to said standby computer, in accordance with the result of said decision in said first step, a physical device name of a copy volume whose volume identifier is changed,

wherein said standby computer has a buffer holding a table for storing in corresponding relation physical device names of volumes and volume identifiers;

a fourth step of causing in said active computer to decide, in accordance with the result of said decision in said first step, whether information is transmitted to said standby computer, said information being adapted to designate a method of changing said volume identifier stored in said buffer in correspondence with said physical device name transmitted to said second computer,

wherein each of said active and standby computers holds a table for storing in corresponding relation physical device names of volumes and flags indicative of statuses concerning the presence or absence of changes of volume identifiers of said volumes;

~~said method further comprising:~~

a fifth step of causing said active computer to store, when a volume identifier stored in a volume is determined to be changed, a first flag in said table in correspondence with a physical device name of said volume; and

a sixth step of causing said standby computer to store, when a volume identifier of a volume stored in said buffer is changed, a second flag in said table in correspondence with a physical device name of said volume.

7. (currently amended) A party switchover method in a computer system having an active computer, a standby computer for taking over processes of said active computer and a disk device for storing volumes shared by said active computer and said standby computer, comprising:

a first step of causing said active computer to decide whether a volume identifier stored in a volume is changed;

a second step of causing said active computer to determine, in accordance with the result of said decision in said first step, transmission to said standby computer of a notice to the effect that said volume identifier is changed;~~A party switchover method according to claim 4,~~

a third step of causing said active computer to transmit to said standby computer, in accordance with the result of said decision in said first step, a physical device name of a copy volume whose volume identifier is changed,

wherein said standby computer has a buffer holding a table for storing in corresponding relation physical device names of volumes and volume identifiers;

a fourth step of causing in said active computer to decide, in accordance with the result of said decision in said first step, whether information is transmitted to said standby computer, said information being adapted to designate a method of changing said volume identifier stored in said buffer in correspondence with said physical device name transmitted to said second computer,

wherein each of said active and standby computers holds a table for storing in corresponding relation physical device names of volumes and flags

indicative of statuses concerning the presence or absence of changes of volume identifiers of said volumes,;

~~said method further comprising:~~

a fifth step of causing said standby computer to decide whether a first flag, stored in said table of said active computer, is stored and whether a second flag, stored in said table of said standby computer, is not stored in said table in correspondence with a physical device name; and

a sixth step of causing said standby computer to decide, in accordance with the result of said decision, whether a volume identifier stored in said buffer in correspondence with said physical device name is to be changed.

Claims 8-11 (canceled).

12. (currently amended) A computer system comprising:

an active computer;

a standby computer for taking over processes of said active computer; and

a disk drive for storing volumes shared by said active computer and said standby computer,

wherein each of said active and standby computers holds a table for storing in corresponding relation physical device names of volumes and flags indicative of statuses concerning the presence or absence of changes of volume identifiers of said volumes,

wherein ~~said~~ a first switching unit of said active computer is adapted to store, in accordance with the result of detection that a volume identifier stored

in a volume is changed by means of said monitor, a first flag in said table in correspondence with a physical device name of said volume, and

wherein said standby computer has a second switching unit which, when a volume identifier of a volume stored in said buffer is changed, stores a second flag in said table in correspondence with a physical device name of said volume.

13. (currently amended)A standby computer connected to an active computer, comprising:

a table for storing in corresponding relation physical device names of volumes and flags indicative of statuses concerning the presence or absence of changes of volume identifiers of said volumes as detected by a monitor of said transmitted from a first switching unit of said active computer; and

a second switching unit for deciding whether a first flag, stored in said table of said active computer, is stored and whether a second flag, stored in said table of said standby computer, is not stored in said table in correspondence with a physical device name, and determining, in accordance with statuses of said flags, whether a volume identifier stored in said buffer in correspondence with said physical device name is to be changed.

14. (new) A computer system comprising:

an active computer which holds a first disk management information buffer adapted to store physical device names of volumes stored in a disk device and volume identifiers with correspondence between the physical device names and the volume identifiers; and

a standby computer which holds a second disk management information buffer adapted to store in corresponding relation physical device names of volumes and volume identifiers and a replica status management table adapted to manage a status concerning the presence or absence of a volume identifier,

wherein said active computer comprises:

a monitor for detecting that execution of a replica corresponding to a volume is completed in said disk device, and

a first switching unit of said standby computer, responsive to the result of the detection in said monitor, for determining to transmit, to said standby computer, a notice for informing said standby computer that a volume identifier stored in said volume subjected to the execution of the replica is changed,

wherein said standby computer comprises:

a second switching unit of said standby computer for executing:

a first process in which when said notice to the effect that said volume identifier stored in said volume is changed is received from said active computer, a first flag is stored in said replica status management table in correspondence with said physical device name of said volume,

a second process including a step of deciding as to whether said first flag is stored in said replica status management table in correspondence with said physical device name according to which said volume identifier stored in said volume is acquired and said acquired volume identifier is stored in said second management information buffer in correspondence with said physical device name of said volume, and

a third process in which when said second process is completed, said first flag stored in said replica status management table in correspondence with said physical device name is erased.